



The Physics of My Life

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Curriculum Area	Science
Subject Area	Physics
Grade Level	12 th grade
Learning Objectives	<ul style="list-style-type: none"> • The student will be able to apply the principles of physics to everyday life. • The student will be able to create a Web page that demonstrates the applications of physics in one area of their own lives.
Correlation to the SOL	Science PH.4 C/T 12.3
Video/Technology Hardware/Software Needed	<p>For class: Computer with Internet connection Computer Projection System Web Authoring software (such as <i>Netscape Communicator</i> or <i>Front Page</i>)</p> <p>For each student: Computer with Internet connection Web Authoring software (such as <i>Netscape Communicator</i> or <i>Front Page</i>)</p> <p>Web Sites: <i>The Physics Of...</i> http://www.kent.wednet.edu/staff/trobinso/physicspages/PhysicsOf.html</p>
Materials Required	<p>For class: Research resources</p>
Procedures/Activities	<ol style="list-style-type: none"> 1. Using the computer projection system, take students to <i>The Physics Of...</i> Web site. Explore two or three of the projects created by students. 2. Tell students that they will be creating a similar web site. They are to choose a topic from their own lives and explain its connection to physics. Give students a copy of the Evaluation Rubric. 3. Students draft a proposal for their project to be pre-approved by the teacher. 4. As students research their project, they might begin to also create their Web page. Demonstrate any skills not already mastered by the students. 5. After students have created their Web pages, have students either publish their pages on the school server, or have them all copied onto a classroom computer to be browsed by the other students.

Content Assessment	See attached rubric .
Technology Integration Assessment	See attached rubric .
Extensions	<p>English: Write an expository paper concerning the findings outlined in the Web site.</p> <p>Current Events: Locate examples of physics' principles being referred to in current newspaper and magazine articles.</p> <p>History: Using students' topics, compare how the illustrated principles were explained by peoples of the past.</p>

Evaluation Rubric for Physics Web Project

	Excellent	Well-done	Average	Needs Work
Web site organization	Appropriate, organized, and effective system for communication of information; all links work correctly	Appropriate and organized system for communication of information; all links work correctly	System for display of information may not be clear or effective; most links work correctly	Disorganized system for display of information.; some links work incorrectly
Web site style	Display of information is precise, accurate, and complete; site is easy to read (i.e., colors, backgrounds, etc do not interfere with text) and does not take a long time to download	Display of information is mostly precise, accurate, and complete; site is easy to read (i.e., colors, backgrounds, etc do not interfere with text) and takes only a moderate time to download	Display of information is somewhat precise, accurate, and complete; site has some problems with text, colors and backgrounds OR too many large graphics	Display of information is not precise, accurate, or complete; site is messy and very difficult to read
Web site content: Interpretations	Interpretations and explanations logical and communicated effectively	Interpretations and explanations logical and mostly clear	Interpretations and explanations somewhat clear	Interpretations and explanations not clear
Web site content: Writing	Writing conventions and style enhances the readability of the site	Writing is clear and without errors	Writing has minor errors which do not detract from ideas presented	Writing has errors which limit readability
Web site content: Vocabulary	Uses appropriate vocabulary and terms	Uses mostly appropriate vocabulary and terms	Uses some inappropriate vocabulary OR use of appropriate vocabulary is limited	Inappropriate vocabulary is pervasive